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BURN ELLIS

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CLAIMS:

Sub 27
32 1. A conveying arrangement for conveying foodstuffs including a conveying surface for conveying a foodstuff, characterised by a decontamination arrangement comprising a first cleaner which comprises a sprayer and is adapted to mechanically remove food debris from the conveying surface; and a second cleaner, downstream of the first, for subjecting said surface to ultraviolet irradiation.

2. A conveying arrangement according to claim 1 in which the conveying means is a belt.

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3. A conveying arrangement according to claim 1 or 2 in which the first cleaner includes one or more of brushes and scrapers.

4. A conveying arrangement according to claim 3 in which the first cleaner comprises a rinse/clean unit having means for directing liquid onto the conveying surface and a brush or scraper such as a rotating brush roller for acting on the conveying surface wetted by the liquid.

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5. A conveying arrangement according to any one of the preceding claims in which the second cleaner applies UV radiation right across the conveying surface at a power of at least 2 W/m².

6. A conveying arrangement according to any one of the preceding claims in which said first cleaner and/or

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said second cleaner acts on the conveying surface at a flexure thereof.

7. A conveying arrangement according to any one of the preceding claims comprising a detection unit positioned adjacent the conveying surface downstream of at least the first cleaner, to detect the presence of any residual matter on the conveying surface after the action of said cleaner.

8. Food processing apparatus comprising a conveying arrangement according to any one of claims 1 to 7.

~~9. A decontamination arrangement comprising first and second cleaners as specified in any one of claims 1 to 7, adapted for fitting to an existing foodstuff conveying arrangement.~~

10. A decontamination arrangement according to claim 9 which includes a liquid containment chamber with entry and exit openings for the conveyor.

Selected 11. A method of adapting a conveyor system by adding to it a decontamination arrangement to form a conveyor arrangement as defined in any one of claims 1 to 7.

12. A method of decontaminating a conveying surface of a foodstuff conveyor, comprising a first step of mechanically removing debris from the conveying surface by a process comprising spraying, and a second step of subjecting said surface to ultraviolet irradiation.

13. A method according to claim 12 in which the first step includes one or more of brushing and scraping of the conveying surface.

~~SUBST~~ 14. A method according to claim 12 or 13 further comprising monitoring the cleanliness of the conveyor surface downstream of at least the first step.

15. A method according to claim 14 comprising modifying, preferably automatically, the first and/or second cleaning steps in dependence on said monitored cleanliness of the conveyor surface.

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